What is claimed is:

1. A method for depositing a method of depositing a seed layer comprising the step of disposing on a substrate having a non-conductive layer and apertures of ≤ 1 μm a layer comprising one or more conductive polymers..

2. The method of claim 1 wherein the non-conductive layer is selected from a dielectric layer or a barrier layer.

3. The method of claim 2 wherein the dielectric layer comprises one or more of silicon dioxide, fluorinated silicon dioxide, organopolysilica materials, or organic dielectric materials.

4. The method of claim 2 wherein the barrier layer is selected from tantalum, tantalum nitride, titanium, titanium nitride, tungsten, tungsten nitride, molybdenum, molybdenum nitride, cobalt or cobalt nitride.

5. The method of claim 1 wherein the one or more conductive polymers are selected from polyaniline, polyacetylene, polypyrrole, polythiophene or graphite.

6. The method of claim 4 wherein the one or more of polyaniline, polyacetylene, polypyrrole or polythiophene are substituted.

7. The method of claim 1 wherein the apertures are less than or equal to 5 μm.

8. A method for depositing a metal layer on a substrate comprising the steps of: disposing on a substrate having a non-conductive layer and apertures of ≤ 1 μm a layer comprising one or more conductive polymers; contacting the substrate with a metal electroplating bath; and subjecting the substrate to a current density for a period of time sufficient to deposit a metal layer on the conductive layer.

9. The method of claim 8 wherein the non-conductive layer is selected from a dielectric layer or a barrier layer.

10. The method of claim 9 wherein the dielectric layer comprises one or more of silicon dioxide, fluorinated silicon dioxide, organopolysilica materials, or organic dielectric materials.

11. The method of claim 9 wherein the barrier layer is selected from tantalum, tantalum nitride, titanium, titanium nitride, tungsten, tungsten nitride, molybdenum, molybdenum nitride, cobalt or cobalt nitride.

12. The method of claim 8 wherein the one or more conductive polymers are selected from polyaniline, polyacetylene, polypyrrole, polythiophene or graphite.

13. The method of claim 12 wherein the one or more of polyaniline, polyacetylene, polypyrrole or polythiophene are substituted.

14. The method of claim 8 wherein the apertures are less than or equal to 5 μm.

15. The method of claim 8 wherein the metal is selected from one or more of copper, nickel, aluminum, tin, lead or tungsten.

16. The method of claim 8 wherein the metal electroplating bath comprises an acidic electrolyte.

17. A method for manufacturing an electronic device comprising the steps of: disposing on an electronic device substrate having a non-conductive layer and apertures of ≤ 1 μm a layer comprising one or more conductive polymers; contacting the substrate with a metal electroplating bath; and subjecting the substrate to a current density for a period of time sufficient to deposit a metal layer on the conductive layer.

18. The method of claim 17 wherein the non-conductive layer is selected from a dielectric layer or a barrier layer.

19. The method of claim 18 wherein the dielectric layer comprises one or more of silicon dioxide, fluorinated silicon dioxide, organopolysilica materials, or organic dielectric materials.

20. The method of claim 18 wherein the barrier layer is selected from tantalum, tantalum nitride, titanium, titanium nitride, tungsten, tungsten nitride, molybdenum, molybdenum nitride, cobalt or cobalt nitride.

21. The method of claim 17 wherein the one or more conductive polymers are selected from polyaniline, polyacetylene, polypyrrole, polythiophene or graphite.

22. The method of claim 21 wherein the one or more of polyaniline, polyacetylene, polypyrrole or polythiophene are substituted.

23. The method of claim 17 wherein the apertures are less than or equal to 5 μm.

24. The method of claim 17 wherein the metal is selected from one or more of copper, nickel, aluminum, tin, lead or tungsten.

25. The method of claim 17 wherein the metal electroplating bath comprises an acidic electrolyte.

26. The method of claim 17 wherein the electronic device is an integrated circuit.

27. A method of enhancing a seed layer comprising the steps of: contacting a substrate having a discontinuous seed layer with one or more conductive polymers to provide a substantially continuous seed layer.

28. The method of claim 27 wherein the non-conductive layer is selected from a dielectric layer or a barrier layer.

29. The method of claim 28 wherein the dielectric layer comprises one or more of silicon dioxide, fluorinated silicon dioxide, organopolysilica materials, or organic dielectric materials.

30. The method of claim 28 wherein the barrier layer is selected from tantalum, tantalum nitride, titanium, titanium nitride, tungsten, tungsten nitride, molybdenum, molybdenum nitride, cobalt or cobalt nitride.

31. The method of claim 27 wherein the one or more conductive polymers are selected from polyaniline, polyacetylene, polypyrrole, polythiophene or graphite.

32. The method of claim 31 wherein the one or more of polyaniline, polyacetylene, polypyrrole or polythiophene are substituted.

33. The method of claim 27 wherein the apertures are less than or equal to 5 μm.

34. An electronic device substrate having apertures of ≤ 1 μm and having a substantially continuous seed layer comprising one or more conductive polymers.